

## UK Senate: Research

Lisa A. Cassis, PhD Professor, Department of Pharmacology and Nutritional Sciences Vice President for Research

## UKRF FY15 Budget Breakdown (\$44 million)



- Research Support Units: 25% of budget
- Enrichment program:
- RAA (to Deans)
- Start-up (formulaic):
- Transfers to UK:
- General support:

- ≈14% of budget
- 5% of budget
- 20% of budget
- 26% of budget
- 10% of budget

100%

# Strategic Plan: Research



Expand our scholarship, creative endeavors, and research across the full range of disciplines to focus on the most important challenges of the Commonwealth, our nation, and the world.

# Strategic Plan: Research



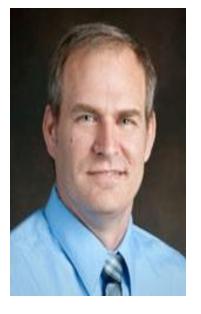
- I. Invest in UK's existing strengths and areas of growth in selected focus areas that benefit and enrich the lives of the citizens of the Commonwealth and beyond.
- II. Recruit and retain outstanding faculty, staff and students that support our research and scholarship across the range of disciplines at the University.
- III. Improve the quality of the research infrastructure across campus.
- IV. Strengthen engagement efforts and translation of research and creative work for the benefit of the Commonwealth of Kentucky, the nation and the world.

# Board level metrics around these initiatives

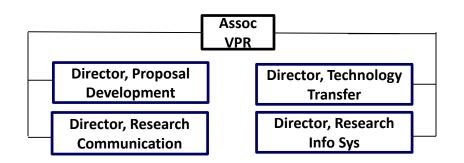


- R&D Expenditures: 1.9% increase/year
- Doctoral program quality: 6 within top quartile
- Research Laboratory Space: 20% increase of space at \$300/square foot
- License #, royalty income: 10 and 1% CAGR





- Rodney Andrews, PhD
- Professor, Director of Center for Applied Energy Research
- Associate VPR, Research Development



Modeling and Visualizing the UK Research Landscape



The ultimate goal: to model UK's research landscape by applying computational methods to the grant submission data. The model will

- Inform high level decision making
- Guide resource distribution across units
- Identify PIs and teams for limited submissions
- Foster new collaborations across campus
- Reveal trends across time

Methods: Descriptive statistics, information retrieval (IR), and topic modeling (TM)

# New Disclosure / Patent Process

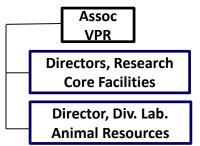


- Disclosures made via current online system
- Intellectual Property Committee chair / IPDO director determine "track"
  - Incomplete, not viable, not UK's, patentable, etc
- Patentable disclosures are sent for outside evaluation by IP assessment firm based on:
  - Patentability
  - Marketability
- Evaluation sent to IPC for go/no-go decision
  - No-go returned for further development or released to inventors





- Alan Daugherty, PhD
- Professor and Chair, Dept of Physiology
- Senior Associate Dean for Research, COM
- Associate VPR, Research Infrastructure (Cores)



#### Service Cores Reporting to the Office of the VPR

- Department of Laboratory Animals (DLAR)
- Flow cytometry
- Imaging
- Magnetic Resonance Imaging and Spectroscopy Center (MRISC)
- Mass Spectrometry
- Proteomics
- Rodent Behavior
- Survey Research Center



#### Faculty Membership of the Service Core Scientific Advisory Committee

Member	College	Core Use
Udeni Balasuriya	Agriculture	Imaging, Flow
D Allan Butterfield	Arts and Sciences	Mass Spec, Proteomics
Alan Daugherty	Medicine	DLAR, Flow, MRISC
David Feola	Pharmacy	DLAR, Flow, Transgenic
Beth Garvy	Medicine	Flow, DLAR
Octavio Gonzalez	Dentistry	Microarray
Greg Graf	Pharmacy	DLAR, Microarray, Proteomics
Eric Grulke	Engineering	DLAR, Imaging
Linda Van Eldik	Medicine	DLAR, MRISC, Rodent Behav.
Sydney Whiteheart	Medicine	DLAR, Imaging, Proteomics
S Randal Voss	Arts and Sciences	DLAR, Microarray







- Allan Butterfield, PhD
- Professor, Department of Chemistry
- Associate VPR, Research Infrastructure (Centers)



## **Research Centers**



- Some Centers are College-specific
- Some Centers that cross College boundaries are managed by the VPR, including:
  - Center for Applied Energy Research (CAER)
  - Center for Computational Sciences (CCS)
  - Center for Research on Violence Against Women
  - Center for Structural Biology
  - Center of Membrane Sciences
  - Human Development Institute (HDI)
  - Kentucky Geological Survey (KGS)
  - Kentucky Water Resources Research Institute
  - Survey Research Center
  - Tracy Farmer Institute for Sustainability and the Environment (TFISE)

## **Center Activities**



- New Center Directors
  - Center for Computational Sciences: James
    Griffioen
  - Human Development Institute: Kathy Sheppard-Jones
  - Ongoing searches: Center for Membrane
    Sciences, Kentucky Geological Survey
  - Upcoming search: Tracy Farmer Center for Sustainability and the Environment
- Development of process for Center support





- Martha Peterson, PhD
- Professor, Department of Microbiology and Immunology
- Senior Associate VPR

# Senior Associate VPR: Offerings



- Research Support Grants
- Equipment Maintenance Program
- Conference/Workshop Grants
- Summer Faculty Research Fellowship
- University Research Professors
- Service Center Pilot Grants
- Complex Research Grants
- Limited Submissions
- All activities of the Offices of Research
- Look for changes in how these programs will be offered



#### Your feedback and input are valued